

**SUMTER COUNTY BOARD OF COMMISSIONERS  
EXECUTIVE SUMMARY**

**SUBJECT:** C469 Mill and Resurfacing Design and Permitting Contract

**REQUESTED ACTION:** Board approval of negotiated contract cost

☐ Work Session (Report Only)

**DATE OF MEETING:** 10/25/2011

☒ Regular Meeting

☐ Special Meeting

**CONTRACT:** ☐ N/A

Vendor/Entity: Kimley-Horn and  
Associates, Inc

Effective Date: 10/26/2011

Termination Date: 8/31/2012

Managing Division / Dept:

Public Works Division/Engineering Branch

**BUDGET IMPACT:** \$120,300 (reimbursable from State CIGP grant of \$2.85M)

☐ Annual

**FUNDING SOURCE:**

CTT

☒ Capital

**EXPENDITURE ACCOUNT:**

103-340-541-6500

☐ N/A

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**HISTORY/FACTS/ISSUES:**

On 23 August and 8 September, respectively, the BOCC and FDOT District 5 approved the agreement to mill and resurface C 469 from CR48 in Center Hill to SR50. The overall County Incentive Grant Program (CIGP) grant is for \$2.85M and includes authorization for design and permitting. FDOT issued the notice to proceed to design on September 13, 2011 (attachment 1).

On September 27, 2011 the BOCC concurred with the selection committee and approved Kimley-Horn and Associates, Inc as the engineering firm to design and permit this project. The Public Works Division has negotiated the attached cost and schedule with KHA (attachment 2), and recommends its approval. Note the schedule currently ends at June 6, 2012, but some bid administration activities could extend into August without further cost.

The grant also includes funding for construction engineering and inspection (CEI). However it prevents the County from using the same engineering firm for design and CEI so the Public Works Division will secure the services of a different firm for CEI and present that proposal to the BOCC at a later date.

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## Florida Department of Transportation

RICK SCOTT  
GOVERNOR

719 S. Woodland Blvd., MS 521  
DeLand, Florida 32720-6834

ANANTH PRASAD, P.E.  
SECRETARY

September 13, 2011

Sumter County  
Attention: Scott Cottrell, P.E.  
Public Works Director  
319 E. Anderson Avenue  
Bushnell, Florida 33513

RE: County Incentive Grant Program Agreement  
Contract #AQF28  
FM#429759-1-58-01  
Resurfacing of County Road 469 from County Road 48 to State Road 50  
Sumter County

Dear Scott:

Pursuant to the notification from our Design Review Department, this letter is to serve as Authorization for your Department to begin design work for the project referenced above. This notification is in effect as of **September 13, 2011**.

All design work will need to be performed in accordance to the above referenced County Incentive Grant Program Agreement.

Sincerely,

*Dianne Peek*

Dianne Peek  
Contract Specialist/Audit Analyst  
District Five Office

DP

cc: Tushar Patel  
Joyce Horne-Harley  
Vince Vacchiano  
Rick Grooms

file



## CONSULTING ENGINEERING AGREEMENT

### RFQ #016-0-2011/AT CR469 RESURFACING

Describing a specific agreement between Kimley-Horn and Associates, Inc. (the "ENGINEER"), and the Board of County Commissioners of Sumter County, Florida (the "BOARD") in accordance with the terms of the Consulting Engineering Agreement dated March 25, 2008, which is incorporated herein by reference.

### PURPOSE AND PROJECT UNDERSTANDING

1. On September 27, 2011, KHA was selected by the BOARD to provide design and permitting services for the resurfacing of C-469 from C-48E in the city of Center Hill to SR50, a distance of approximately 5.7 miles.
2. The design will include pavement resurfacing/rehabilitation specifications, one intersection improvement, and minor structure top repairs.
3. The design will include a 2-foot lane widening and a 2-foot shoulder widening on each side of the existing roadway (a total of 4 feet widening for each travel lane) in the open swale drainage sections.
4. This work order includes survey services, geotechnical testing services and engineering design and permitting services.
5. The purpose of this project is to extend the life of the existing roadway to the extent possible with the funds available. The existing roadway will be evaluated against the current FDOT Greenbook design standards. Where substandard conditions exist they will either be corrected, or they will require a design exception from Sumter County.
6. Striping will be replaced in the same location and configuration as currently exists. A passing distance study is not included in this project.

With the above in mind, the following additional scope of services, schedule, and fees are provided below.

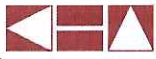
### SCOPE OF SERVICES

The ENGINEER will provide the following services for this project:

#### *Task 1 – Geotechnical Field Investigation*

For the purposes of this task, the ENGINEER will subcontract to Central Testing Laboratory (CTL) to provide geotechnical explorations of the roadway.

- 1.1 CTL will perform twenty six (26) asphalt roadway cores to determine the condition and thickness of the existing asphalt pavement. This quantity is based on one core per lane mile of roadway and one core on each side of a noticeable change in pavement surface (i.e. overlay, patch, or repair). At each core location, measurements will be made for lane width, cross slope and rut depth. Observations will be made of cracking in the pavement surface to identify crack type, crack depth and severity of cracking. All data collected will be recorded on a Pavement Evaluation Coring and Condition Data Sheet to be included in a final report.



- 1.2 Auger borings will be performed through the core holes to document base and subgrade type and thickness. The auger boring will extend to a depth of five (5) feet below the pavement surface and will identify each soil type encountered. Boring logs will be prepared showing the pavement section materials and soil profile below the pavement section.
- 1.3 Ten deeper auger borings will be performed to a depth of ten feet in areas of concern relating to previous roadway repairs, areas having potential flooding and areas identified in the soil survey as mucky sand and muck. Soil materials retrieved will be returned to the laboratory and visually classified by one of our engineers to the AASHTO Classification System. If deemed necessary, laboratory analysis of the recovered samples will be performed to assist in the classification process.
- 1.4 Six (6) composite samples, three (3) of base material and three (3) of subgrade materials encountered will be subjected to a Limerock Bearing Ratio (LBR) test. All data collected during the field and laboratory services will be assembled into a final signed and sealed geotechnical report.

#### ***Task 2 – Surveying Services***

For the purposes of this task, the ENGINEER will subcontract with Farner Barley and Associates, Inc. (FBA) to provide professional surveying and mapping services.

- 2.1 FBA will prepare a Record Survey in compliance with Florida Minimum Technical Standards Rule 5J-17 FAC for engineering design. Horizontal datum will be related to '83 Florida State Plane Coordinates; elevations will be based upon 1988 Vertical Datum. The survey will include the following:
  - a) Establish project corridor, locate section corners and existing right of way.
  - b) Location and elevations of existing pavement.
  - c) Cross drains with inverts, including head walls (9+/-).
  - d) Detailed topo of intersections or areas of special concern (3 maximum) with site bench marks for construction.
  - e) Cross-sections of 100' r/w at 200' intervals.
- 2.2 A base map of right-of-way corridor of County Road 469 will be prepared, starting at a point approximately 150 feet east of county road 48 (end of previous construction), proceeding east and south terminating at the intersection of State Road 50 (approximately 5.7 miles).

#### ***Task 3 – Design and Permitting***

- 3.1 The ENGINEER will perform a field visit to generally document the condition of the roadway corridor and compare existing conditions to the survey and geotechnical field information. The ENGINEER will document the limits of the existing striping on the roadway corridor.
- 3.2 The ENGINEER will prepare for and attend progress meetings as well as provide coordination with the BOARD. This proposal assumes up to three progress meetings over the course of the project. During the first of these meetings, the ENGINEER and the BOARD will review information gathered by both parties and the BOARD will provide input on the desired resurfacing design section(s).



- 3.3 The ENGINEER will prepare for and attend one public meeting, expected to be held near the project site with select residents, to discuss the project, answer questions and gather citizen comments.
- 3.4 The ENGINEER will prepare a flexible pavement (asphalt) design for the proposed resurfacing design, based on readily available traffic counts.
- 3.5 The ENGINEER will design the roadway cross section, shoulder improvements, and flexible pavement design in accordance with FDOT Greenbook standards. The proposed roadway cross section will include a 2-foot lane widening, and a 2-foot shoulder widening on each side of the existing roadway (a total of 4 feet widening for each travel lane) in the open drainage sections. The final condition will provide two paved 12' travel lanes, with 2' paved shoulders, for a total pavement width of 28'.
- 3.6 The ENGINEER will review historic drainage maps, FEMA maps, citizen comment and any other readily available information pertinent to the reported flooding issues at CR710. From the ENGINEER's preliminary work on this project, it is not expected that C-469 will be raised. This work order does not include the design or permitting of raising the existing roadway, the addition of drainage retention areas, additional cross drains, etc. Should those improvements be proposed, a separate work order will be prepared for those services.
- 3.7 The ENGINEER will design intersection improvements at the intersection of C-469 and CR716 to provide improved access at this location. These improvements will include a northbound taper, upgraded signage and striping, and a paved intersection approach on the east leg of the intersection to the points of curvature on the radius returns.
- 3.8 The ENGINEER will evaluate the signage and striping at the SR50 intersection and include recommended upgrades in the design plans.
- 3.9 The ENGINEER will evaluate the condition of the broken inlet tops in the Center Hill segment of C-469 and design repair/replacement alternatives. The ENGINEER will also evaluate the existing cross drains for their locations within the roadway clear zone. Those cross drains with end treatments located within the roadside clear zone will need to be extended, or a design exception issued by Sumter County. Hydraulic analysis of any pipe or structure is not included in this project.
- 3.10 The ENGINEER will retrieve and analyze readily available crash data records for the project limits to determine if a condition exists that should be corrected based on crash history.
- 3.11 The ENGINEER will prepare construction drawings and contract specifications for the project that adhere to the FDOT County Incentive Grant Program (CIGP) funding requirements. The construction plans will generally be schematic in nature and will be prepared to the level of detail generally needed to convey the typical section and limits of construction for the project. Where specific design improvements are proposed, specific sheets will be prepared depicting those improvements. The construction drawings will generally consist of the following sheets on 24"x36" size:
  - a) **Cover Sheet** (1 sheet).
  - b) **General Notes** (1 sheet).
  - c) **Typical Section** (1 sheet) – One typical section will be developed to illustrate the resurfacing and widening design and one typical section will be developed to illustrate the area near CR710 where poor soil conditions are expected to be found.



- d) **Key Sheets** (6 sheets – Double Panel at 1"=100') – The Key Sheets will graphically depict the centerline, approximate stationing, and existing striping for the project limits. The striping will be based on field measurements and will be intended for determining approximate quantities only. The Contractor will be required to replicate the existing striping found in the field. The Key Sheets will not be suitable for construction stake out, but will convey the general limits of the improvements for the construction contractor.
- e) **Miscellaneous Improvement Sheets** (Up to 4 Sheets) – the Miscellaneous Improvement Sheets will depict specific geometric improvements throughout the project limits where a greater level of detail is required to convey the design. These sheets are expected to include intersection improvements, specific signage improvements, culvert extensions, etc.
- f) **Stormwater Pollution Prevention Plan** – (4 Sheets)
- g) **Details Sheet** (1 sheet)
- h) **Maintenance of Traffic** design will be addressed with general notes and reference to the applicable FDOT Index.

The ENGINEER will submit up to five (5) copies of the roadway plans at 60%, 90% and Final completion stage to the BOARD. In addition, the ENGINEER will submit two (2) copies of the roadway plans at 90% stage to affected utility companies. The plan sheets will be submitted as 24"x36" plan sheets. An electronic copy will be provided at the Final plan submittal.

- 3.12 The ENGINEER will develop quantities consistent with County preferences and prepare an Opinion of Probable Costs (OPC). The OPC will be submitted with the 60%, 90% and Final set of plans.

*Note: The Engineer has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided in accordance with this Agreement are based on the information known to Engineer at the time the opinions of cost are developed and represent only the Engineer's judgment as a design professional familiar with the construction industry. Actual costs for proposals, bids, or actual construction costs will be different.*

- 3.13 **SWFWMD Permitting** – The ENGINEER will discuss the project with SWFWMD staff during the design phase. The ENGINEER will prepare and submit a package to SWFWMD at the 60% plan level requesting exemption from permitting based on section 40D-4.051(13), which allows an exemption from permitting for road widening and shoulder paving projects which do not result in the creation of additional traffic lanes. The ENGINEER will coordinate with SWFWMD during their review of the exemption request. If SWFWMD determines that a permit will be required for this project, the ENGINEER will prepare a scope and fee for that work for the BOARD to review and approve.
- 3.14 **FDOT Permitting and Coordination** – The ENGINEER will submit the 90% plans to FDOT for review by their Local Agency Program (LAP) consultant and reply to two comment letters. It is expected that FDOT will review the plans for general constructability consistency with the CIGP grant funding requirements, but not the level of detail that would be required for a project to be constructed by the FDOT. The ENGINEER will assist the BOARD in providing schedules, forms, executive summaries, etc. that may be requested by the FDOT.
- 3.15 **City of Center Hill Coordination** – The ENGINEER will provide a copy of the 90% plans to the City of Center Hill for coordination purposes. It is not anticipated that Center Hill will require a site development permit of any kind, but will require general coordination and information on the scope of the improvements within the city limits and the anticipated construction schedule.

- 3.16 *Bid Administration Assistance.* ENGINEER will prepare and assemble construction bidding documents, including specifications for the subject Work and the construction contract, based on "Standard General Conditions of the Construction Contract" (EJCDC No. C-700, 2007 edition) prepared by the Engineers Joint Contract Documents Committee. ENGINEER will issue bid packages for the submittal of quotations to perform the work and conduct one pre-bid meeting with potential bidders. We will tabulate the bids received and evaluate the compliance of the bids received with the bidding documents. We will prepare a written summary of this tabulation and evaluation.

#### **ADDITIONAL SERVICES**

Any professional services not specifically listed in the above Scope of Services are not included in the contracted fees. Should the BOARD desire any of these services, the ENGINEER will prepare a fee, scope and schedule for the work at the time the services are requested.

#### **SERVICES NOT PROVIDED IN THIS SCOPE**

1. Storm Water Management design,
2. Drainage Analysis of existing side/cross drains,
3. Traffic Control Plans,
4. Utility Adjustment Plans,
5. Signalization Plans,

#### **SERVICES PROVIDED BY THE BOARD**

1. The BOARD will provide reviews of construction plan submittals at the intervals requested by the ENGINEER.
2. The BOARD will be the applicant and provide signatures for all permitting.
3. The BOARD will provide copies of any existing plans, reports or permits that may effect the design of this project

#### **SCHEDULE**

The ENGINEER will provide the above Scope of Services according to the attached schedule. If events occur that are not within control of the ENGINEER the schedule will be adjusted accordingly.



### FEE

The ENGINEER will perform the services described in Tasks 1 -3 of the Scope of Services for a lump sum fee of \$120,300. A breakdown by subtask is provided below:

Task	Description	Labor Fee
1	Geotechnical Field Investigation	Lump Sum: \$12,400
2	Surveying Services	Lump Sum: \$35,100
3.1-3.12	Design	Lump Sum: \$60,400
3.13-3.15	Permitting	Lump Sum: \$3,500
3.16	Bid Administration Assistance	Lump Sum: \$8,900

All permitting, application, and similar project fees will be paid directly by the Board. Permit fees are expected to be from \$100.00 - \$1,000.00. Fees and expenses will be invoiced monthly based, as applicable, upon the percentage of services performed or actual services performed and expenses incurred as of the invoice date. Payment will be due within 10 days of your receipt of the invoice, as per Item 6 in the Consulting Engineering Agreement. If additional efforts become necessary during the performance of the assignment, the ENGINEER will immediately advise the Board of any budget revisions.

ACCEPTED:

BOARD OF COUNTY COMMISSIONERS  
OF SUMTER COUNTY, FLORIDA

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

KIMLEY-HORN AND ASSOCIATES, INC.

BY:   
Richard V. Busche, PE

TITLE: Vice President

DATE: October 11, 2011

